

36 Lecture - PHY301

Important Mcqs

Which of the following is the configuration of a full wave rectifier?

- a) Center-tap
- b) Bridge
- c) Half-wave
- d) None of the above

Answer: b) Bridge

How many diodes are used in a full wave rectifier?

- a) 1
- b) 2
- c) 3
- d) 4

Answer: d) 4

What is the purpose of the filter capacitor in a full wave rectifier circuit?

- a) To increase the ripple in the output
- b) To reduce the ripple in the output
- c) To decrease the output voltage
- d) None of the above

Answer: b) To reduce the ripple in the output

What is the ripple frequency in a full wave rectifier?

- a) Half the frequency of the AC input
- b) Equal to the frequency of the AC input

- c) Double the frequency of the AC input
- d) None of the above

Answer: c) Double the frequency of the AC input

What is the efficiency of a full wave rectifier compared to that of a half wave rectifier?

- a) Higher
- b) Lower
- c) Same
- d) Cannot be determined

Answer: a) Higher

What is the output voltage of a full wave rectifier compared to that of a half wave rectifier?

- a) Higher
- b) Lower
- c) Same
- d) Cannot be determined

Answer: a) Higher

What is the purpose of the center-tapped transformer in a full wave rectifier circuit?

- a) To provide DC voltage
- b) To reduce the ripple in the output
- c) To double the output voltage
- d) None of the above

Answer: d) None of the above

What is the peak inverse voltage rating required for the diodes in a full wave rectifier circuit?

- a) Equal to the peak voltage of the AC input
- b) Twice the peak voltage of the AC input
- c) Half the peak voltage of the AC input

d) None of the above

Answer: b) Twice the peak voltage of the AC input

What is the type of output waveform produced by a full wave rectifier?

a) Sine wave

b) Square wave

c) Triangular wave

d) None of the above

Answer: d) None of the above (It is a pulsating DC waveform)

What is the range of the output voltage of a full wave rectifier circuit?

a) 0 to the peak voltage of the AC input

b) 0 to twice the peak voltage of the AC input

c) Equal to the RMS voltage of the AC input

d) None of the above

Answer: b) 0 to twice the peak voltage of the AC input